

**IN THE CLAIMS:**

1. (Currently Amended) A system for predicting semiconductor product costs at a fabricator comprising:

a storage medium including a database of historical costs and historical critical gate dimensions ~~and historical critical groundrules correlated to cost functions of different technologies run~~ at said fabricator;

a user interface ~~having~~ adapted to receive user inputs for new design parameters and new critical ~~groundrules~~ gate dimensions associated with a new device to be produced at said fabricator; and

a computer adapted to:

receive said user inputs;

perform a regression ~~analysis on historical costs of historical critical gate dimensions at said fabricator~~; using said historical critical gate dimensions as independent variables and said historical costs as dependent variables[[:]], wherein said regression analysis produces relationship curves that only show ~~create, in said database, models from said regression analysis only showing a~~ relationships between said historical critical gate dimensions and said historical costs;

~~input new design parameters and new critical gate dimensions of a new device into said database~~; and

predict product costs of said new device based on said user inputs and said models relationship curves.

2. (Previously Presented) The system in claim 1, wherein said historical critical gate dimensions and said new critical gate dimensions comprise gate dimensions.

3. (Previously Presented) The system in claim 1, wherein said new critical gate dimensions are smaller than said historical critical gate dimensions.

4. (Previously Presented) The system in claim 1, wherein said new device comprises a technology generation that is yet to be developed.

5. (Previously Presented) The system in claim 4, wherein fabrication hardware and fabrication methods for producing said technology generation are unknown.

6. (Cancelled).

7. (Currently Amended) The system in claim 1, wherein said ~~models~~ relationship curves ~~comprise models that~~ illustrate that costs increase exponentially as said historical critical gate dimensions and said historical critical groundrules are reduced.

8. (Currently Amended) A method of predicting semiconductor product costs comprising:

storing, in a database, historical costs and historical critical gate dimensions of different technologies run at a fabricator;

~~performing a regression analysis on historical costs of historical critical gate dimensions at a fabricator,~~ using said historical critical gate dimensions as independent variables and said historical costs as dependent variables[[:]], wherein said regression analysis produces relationship curves that show only creating, in a database, models from ~~said regression analysis only showing a relationships~~ between said historical critical gate dimensions and said historical costs;

inputting new design parameters and new critical gate dimensions of a new device into said database; and

predicting product costs of said new device based on said ~~models~~ relationship curves.

9. (Previously Presented) The method in claim 8, wherein said historical critical gate dimensions and said new critical gate dimensions comprise gate dimensions.

10. (Previously Presented) The method in claim 8, wherein said new critical gate dimensions are smaller than said historical critical gate dimensions.
11. (Previously Presented) The method in claim 8, wherein said new device comprises a technology generation that is yet to be developed.
12. (Previously Presented) The method in claim 11, wherein fabrication hardware and fabrication methods for producing said technology generation are unknown.
13. (Cancelled).
14. (Currently Amended) The method in claim 8, wherein said ~~models~~ relationship curves illustrate that costs increase exponentially as said historical critical gate dimensions and said historical groundrules are reduced.
15. (Currently Amended) A system for predicting semiconductor product costs at a fabricator comprising:  
a regression analyzer adapted to produce relationship curves that show only ~~determine~~ relationships between historical critical gate dimensions and historical costs of ~~historical different~~ technologies run at said fabricator and costs of said historical ~~technologies~~;  
a user interface for inputting a new critical dimension of a new technology; and  
a calculator for predicting a cost of said new technology based only on said new critical gate dimension and said relationship curves.
16. (Previously Presented) The system in claim 15, wherein said historical critical gate dimensions and said new critical gate dimensions comprise gate dimensions.
17. (Previously Presented) The system in claim 15, wherein said new critical gate dimensions are smaller than said historical critical gate dimensions.

18. (Original) The system in claim 15, further comprising a storage unit adapted to store a database of said relationships.

19. (Previously Presented) The system in claim 15, wherein said new device comprises a technology generation that is yet to be developed.

20. (Currently Amended) The ~~method~~ system in claim 19, wherein fabrication hardware and fabrication methods for producing said technology generation are unknown.

21. (Currently Amended) A computer program product stored a storage device readable by a computer, wherein said computer program product comprises including a computer program for performing a method of predicting semiconductor product costs, said method comprising:

storing, in a database, historical costs and historical critical gate dimensions of different technologies run at a fabricator;

performing a regression analysis ~~on historical costs of historical critical gate dimensions at a fabricator,~~ using said historical critical gate dimensions as independent variables and said historical costs as dependent variables[[:]], wherein said regression analysis produces relationship curves that only show create, in said database, models from said regression analysis only showing a relationships between said historical critical gate dimensions and said historical costs;

inputting new design parameters and new critical gate dimensions of a new device into said database; and

predicting product costs of said new device based on said ~~models~~ relationship curves.

22. (Previously Presented) The computer program product in claim 21, wherein said historical critical gate dimensions and said new critical gate dimensions comprise gate dimensions.

23. (Previously Presented) The computer program product in claim 21, wherein said new critical gate dimensions are smaller than said historical critical gate dimensions.
24. (Previously Presented) The computer program product in claim 21, wherein said new device comprises a technology generation that is yet to be developed.
25. (Previously Presented) The computer program product in claim 24, wherein fabrication hardware and fabrication computer program products for producing said technology generation are unknown.
26. (Cancelled).
27. (Currently Amended) The computer program product in claim 21, wherein said ~~models~~ relationship curves illustrate that costs increase exponentially as said historical critical gate dimensions are reduced.